

DESCRIPTION**GENERAL**

This work shall consist of furnishing all labor and equipment to place a protective covering of erosion - resistant material on embankment slopes, streambanks, at culvert inlets or outlets, on bottoms and side slopes of channels, at structure foundations, and at other locations shown on the plans or as directed by the ENGINEER. The work shall be done in accordance with these specifications and in conformity with the lines, grades, thicknesses, and typical sections shown on the plans or established by the ENGINEER.

MATERIALS**CONCRETE MATS**

If furnished by Monroe County, mats available are 1.22m x 4.88m.

If the mats are to be purchased under the Contract Item, the concrete shall be the following size(s):

Engineer shall fill in size designation

Note: Engineer should verify selected size for site conditions (i.e. flow velocities, slope).

BEDDING MATERIAL

Bedding material shall consist of granular materials placed in a layer where required, on ground surface prior to placing concrete mats for leveling purposes only. Bedding material shall be in conformance with the applicable sections of NYSDOT Standard Specifications Section 620 Bank and Channel Protection, latest revision.

GEOTEXTILE

Shall be a 6 oz. nonwoven geotextile fabric from the approved geotextile list. The geotextile shall be physically bonded to bottom of trapezoidal concrete blocks during manufacturing process (i.e. while concrete is in the "plastic state" and prior to initial set).

ANCHORS

Provide anchors at 6 meters o.c. on the upstream leading edge of the mats. Anchor every 1.4 meters for other outside edges. Depth of anchor: 1 meter.

CLAMPS

Mats shall be clamped together at every other loop with a U-type cable clamp.

CONSTRUCTION DETAILS**GENERAL**

Concrete mats shall be placed as protective material on streambank in channels and elsewhere as required in order to provide protection against erosion.

The ground surface on which bank or channel protection is to be placed shall be free of brush, trees, stumps, and other objectionable material and shall be dressed to a smooth surface. All soft or spongy materials shall be removed to the depth shown on the plans or if not shown on the plans as directed by the ENGINEER and replaced with approved material. Filled areas shall be compacted in accordance with applicable provisions of NYSDOT Standard Specifications, Section 203-3.12, Compaction, latest revision. Protection for structure foundations shall be provided as early as the foundation construction permits. The type of protection shall be placed in accordance with these specifications and the contract documents.

CONCRETE MAT

Each concrete mat shall be laid from the downstream end of the site and with the overlapping of the mats on the geotextile fabric. The upstream leading edge and other outside edges of the concrete area shall be trenched at least one block high and backfilled. (This may vary depending on site conditions, refer to the project plans for any additional details that may be required). The remainder of the mat shall be laid so that the toe of the blocks are flush with the ground. After placement of the Concrete Mats, leave voids on the Concrete Mat to naturally silt in. Refer to the project plans and specifications for layout and further information.

METHOD OF MEASUREMENT

The work shall be measured as the number of square meters of surface area of the Concrete Mat computed from the payment lines as shown on the plans covered with the complete channel protection mat system. No separate measurement shall be made for daylighting the edges of the concrete mat at the top of bank into the existing grade.

BASIS OF PAYMENT

If the material is furnished by Monroe County, the unit price bid per square meter for this item shall include the cost of transporting the furnished materials from the storage site to the project site and all labor, materials, and equipment necessary to complete the work. The furnished material is at the Department of Transportation storage yard. CONTRACTOR shall contact Dave Condello at 760-7744 to make arrangements for pickup of the material.

If the item is purchased by the CONTRACTOR, the unit price bid shall include the cost of all labor, materials, and equipment necessary to complete the work.

No payments will be made for any work necessitated by damage attributable to the CONTRACTOR'S operations.

Payment for the sizes indicated on the plans shall be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
620.5004 M	Concrete Mat and Channel Protection (furnished)	SM
620.5005 M	Concrete Mat and Channel Protection	SM